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RCRA CLOSURE PLAN

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W.G. KRUMMRICH PLANT
SAUGET, ILLINOIS
USEPA ID: ILD 000 802 702
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This document has been prepared in accordance with accepted scientific and engineering practices and procedures and Versar, Inc's Quality Assurance Program.

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TABLE D-1
DESCRIPTION OF CONTAINERS

WASTE STREAM COMMON NAME & EPA WASTE CLASSIFICATION	WASTE DESCRIPTION	PHYSICAL STATE	CONTAINER SIZE/TYPE	DRUM STOCK NUMBER[1]	BARRIER OR INTERNAL COATING TYPE	CONTAINER COMPATIBILITY RATIONALE
ROUTINE WASTES						
PCB Contaminated Chlorobenzene Residue K086, D001, D018, D021, D027, D032	Distillation column bottoms from the production of chlorobenzene Department 233.	Liquid	55-gal Mild Steel Drum & Tank Truck	93233 N/A	Baked phenolic resin coating[2]	Baked phenolic coating recommended for room temperature (<160° F service with aromatic and chlorinated hydrocarbons (Reference: Table "Chemical Resistance of Coatings for Immersion Service", Perry's Che Handbook, Sixth Edition).
PCB Contaminated Chlorobenzene P-DB Residue K086, D018, D021, D027, D032	Distillation Bottoms from the production of dichlorobenzene in Department 224.	Liquid	55-gal Mild Steel Drum & Tank Truck	93233 N/A	Baked phenolic resin coating[2]	Baked phenolic coating recommended for room temperature (<160° F service with aromatic and chlorinated hydrocarbons (Reference: Table "Chemical Resistance of Coatings for Immersion Service", Perry's Che Handbook, Sixth Edition).
PCB Contaminated Carbon D018	Dry tower spent carbon from HCL gas stream in Chlorobenzene Department 233	Solid	55-gal Mild Steel Drum	93233	Baked phenolic resin coating[2]	Baked phenolic coating recommended for room temperature (<160° F service with aromatic and chlorinated hydrocarbons (Reference: Table "Chemical Resistance of Coatings for Immersion Service", Perry's Che Handbook, Sixth Edition).
MCB Molecular Sieve Waste D010, D018, D021, D027	Generated during periodic replacement of molecular sieve material in Department 233 (Chlorobenzene production).	Solid	20-gal Fibre Drum	92813	1 mil Polyester barrier	The physical state of this waste stream is a solid. Additional protectio internal moisture barrier. Fibre drum packaging is authorized by DOT a packaging for this material (refer to 49 CFR 172.101). Steel parts are corrosion (locking band is electrogalvanized).
Scrap PDCB U072, D027, U071	Off-Spec Paradichlorobenzene from equipment cleaning of continuous crystallizer in Department 224.	Solid	20-gal Fibre Drum	92813	1 mil Polyester barrier	The physical state of this waste stream is a solid. Additional protectio internal moisture barrier. Fibre drum packaging is authorized by DOT a packaging for this material (refer to 49 CFR 172.101). Steel parts are corrosion (locking band is electrogalvanized).
ODCB Molecular Sieve Waste D010, D027	Generated during periodic replacement of molecular sieve material in Department 224 (Dichlorobenzene production).	Solid	20-gal Fibre Drum	92813	1 mil Polyester barrier	The physical state of this waste stream is a solid. Additional protectio internal moisture barrier. Fibre drum packaging is authorized by DOT a packaging for this material (refer to 49 CFR 172.101). Steel parts are corrosion (locking band is electrogalvanized).
Waste Therminol D008, D018	Heat transfer fluid - hydrogenated terphenyls. Generated plantwide from oil changes in heat transfer systems. May also be generated during equipment repair or spill cleanup. Wastes generated during equipment repair or spill cleanup may be a solid if cleanup/decon done with granular absorbent.	Liquid	55-gal Mild Steel Drum	93233	Baked phenolic resin coating[2]	Baked phenolic coating recommended for room temperature (<160° F service with aromatic hydrocarbons (Reference: Table 23-23, "Chemic Coatings for Immersion Service", Perry's Chemical Engineers' Handbo Edition).
		Solid	10 or 20 gallon fibre drum	92087 92813	Mylar barrier 1 mil polyester barrier	The physical state of this waste stream when stored in fibre drums is wastes may be stabilized with granular absorbent during cleanup activ protection is provided by internal moisture barrier. Fibre drum packag by DOT as non-bulk packaging for this material (refer to hazardous wa N.O.S, in 49 CFR 172.101).
Waste Phosphorus D001, D003, D008	Waste Phosphorus from Department 245 equipment cleanouts and infrequent generation of off-spec materials in Department 245.	Solid under water layer	30-gal or 50-gal high density polyethylene drum	See note 4	none	Phosphorus is largely insoluble. Polyethylene has complete resistance phosphoric acid which may form in water layer over waste. (Referenc "Detailed Corrosion Data on Construction Materials", Perry's Chemica Handbook, Sixth Edition).

Notes:

[1] - Refer to Packaging Specification sheets in Appendix 10 for container construction materials, dimensions and useble volumes, applicable UN standards and DOT specifications, and other manufacturer specifications.

[2] - 2 coats Heresite P-413D, P-4443 lacquer or equivalent. (Baked phenolic resin, 1.5 mil D.F.T.).

[3] - Container size and type may vary for discarded commercial chemical products, raw materials, intermediates, and spill cleanup residues, depending on requirements of offsite treatment/disposal facility. Wastes which are discarded raw in original container in which the material was purchased.

[4] - Specifications for the 30 gallon open top plastic drum used for waste phosphorus are included in the Packing Specification sheets in Appendix 8. Refer to the unnumbered sheet labeled "Waste Phosphorus".

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WASTE STREAM COMMON NAME & EPA WASTE CLASSIFICATION	WASTE DESCRIPTION	PHYSICAL STATE	CONTAINER SIZE/TYPE	DRUM STOCK NUMBER[1]	BARRIER OR INTERNAL COATING TYPE	CONTAINER COMPATIBILITY RATIONALE
Waste P_2S_5 D003, U189	Waste and Off-specification Phosphorus Pentasulfide from Department 245.	Solid	6-gal Fibre Drum	92088	0.0005" aluminum foil barrier	The physical state of this waste stream is a solid. Additional protection is provided by internal moisture barrier. Fibre drum packaging is authorized by DOT as non-bulk packaging for this material (refer to 49 CFR 172.101). Steel parts are treated to resist corrosion (locking band is electrogalvanized).
Laboratory Solvent Waste D001, D018, D021, D027, D035, D036, D038, F002, F003, F005	Waste solvents mixed with sample residuals from plant QA/QC analysis and other analysis in plant laboratory.	Liquid	55-gal Mild Steel Drum	93233	Baked phenolic resin coating[2]	Baked phenolic coating recommended for room temperature (< 160° F) immersion service with alcohols, and aliphatic, aromatic, and chlorinated hydrocarbons (Reference: Table 23-23, "Chemical Resistance of Coatings for Immersion Service", Perry's Chemical Engineers' Handbook, Sixth Edition).
Paint Solvent D001, D007, D008, F002, F005	Waste lacquer and paint thinner from paint shop cleanup of paint spray guns and painting equipment.	Liquid	55-gal Mild Steel Drum	93153	none	According to 1985 NACE Corrosion Data Survey (Metals Section, 6th edition) the corrosion rate for mild steel in immersion service with the listed solvents in the paint solvent waste (1,1,1-Trichloroethane: F002, or Toluene: F005) is less than 2 mils per year.
Waste Oil D018, D035	Spent lubricants (cutting oils, hydraulic oils, and lubricating oils) from manufacturing equipment maintenance and repair (from compressors, motors, and pumps plantwide).	Liquid	55-gal Mild Steel Drum	93233	Baked phenolic resin coating[2]	Baked phenolic coating recommended for room temperature (< 160° F) immersion service with aliphatic and aromatic hydrocarbons (Reference: Table 23-23, "Chemical Resistance of Coatings for Immersion Service", Perry's Chemical Engineers' Handbook, Sixth Edition).
Lab Packs D001, D021, D022, D027, U037, U070, U071, U072	Various plant laboratory samples generated in small quantities.	Liquid/ Solid	10-gal Fibre Drum	92605	none	Fibre drum packaging is authorized by DOT as non-bulk packaging for this material (refer to 49 CFR 172.101).
Ketone Residue D001, D035	Ketone Residue wastes (primarily ketones and alcohols) generated in Department 277.	Liquid	11,885-gal Aboveground Carbon Steel Tank	N/A	none	Refer to Tank 595 Assessment, Appendix 12
NCB Residue - "High Boilers" D021, D035	Nitrochlorobenzene still bottoms from Dept. 221 high boiler column sump and off-spec NCB products.	Liquid	6000-gal Aboveground Carbon Steel Tank	N/A	none	Refer to Tank 552 Assessment, Appendix 11
NCB Residue - Meta D021, D035	Meta-nitrochlorobenzene residue byproduct from production of NCB in Dept. 221.	Liquid/ Solid	Tank Car	N/A	none	According to 1985 NACE Corrosion Data Survey (Metals Section, 6th edition) the maximum corrosion rate for mild steel in immersion service with constituents in this waste stream is 25-50 mils per year (assuming nitrobenzene contaminated with water). This maximum corrosion rate is much lower than the RCRA definition of corrosive (> 250 mils/year).
Scrap NCB and NCB-Filter Aid Waste D021, D035	NCB from Dept. 221 equipment cleanouts with filter aid from filter pressing to recover product back to process. This waste stream may also contain NCB mixed with floor dry from minor spill cleanup activities.	Solid	20-gal Fibre Drum	92613	1 mil Polyester barrier	The physical state of this waste stream is a solid. Additional protection is provided by internal moisture barrier. Fibre drum packaging is authorized by DOT as non-bulk packaging for this material (refer to 49 CFR 172.101). Steel parts are treated to resist corrosion (locking band is electrogalvanized).
Chlorobenzene Residue (Solid) D018, D021, D027, D032, K085	Material generated from minor spill cleanup (Dept. 233 & 224)	Solid	20-gal Fibre Drum	92613	1 mil Polyester barrier	The physical state of this waste stream is a solid. Additional protection is provided by internal moisture barrier. Fibre drum packaging is authorized by DOT as non-bulk packaging for this material (refer to 49 CFR 172.101). Steel parts are treated to resist corrosion (locking band is electrogalvanized).

Notes:

[1] = Refer to Packaging Specification sheets in Appendix 10 for container construction materials, dimensions and useable volumes, applicable UN standards and DOT specifications, and other manufacturer specifications.

[2] = 2 coats Hereaite P-413D, P-4443 lacquer or equivalent. (Baked phenolic resin, 1.6 mil D.F.T.).

[3] = Container size and type may vary for discarded commercial chemical products, raw materials, intermediates, and spill cleanup residues, depending on requirements of offsite treatment/disposal facility. Wastes which are discarded raw materials may be packaged in original container in which the material was purchased.

[4] = Specifications for the 30 gallon open top plastic drum used for waste phosphorus are included in the Packing Specification sheets in Appendix 8. Refer to the unnumbered sheet labeled "Waste Phosphorus".

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WASTE STREAM COMMON NAME & EPA WASTE CLASSIFICATION	WASTE DESCRIPTION	PHYSICAL STATE	CONTAINER SIZE/TYPE	DRUM STOCK NUMBER[1]	BARRIER OR INTERNAL COATING TYPE	CONTAINER COMPATIBILITY RATIONALE
MCB Spent Carbon D018	Spent carbon from acid purification process in Department 233. (Tank 767)	Solid	7,880-gal Aboveground Rubber Lined Carbon Steel Tank	N/A	Rubber	Refer to Tank 767 Assessment, Appendix 13
Spent Carbon (Totes) D018, D021, D027	Spent carbon from vapor phase adsorbers on storage tanks and process vessel vents (Dept. 233)	Solid	96 ft³ Steel tote bin	N/A	Coal Tar Epoxy	Spent carbon tote bins are stored onsite for less than 90 days. The offsite vendor that regenerates the carbon inspects the tote bin interior each time when the carbon is removed for regeneration.
PRODUCTS/INTERMEDIATES/RAW MATERIALS[2]						
Para-nitroaniline, P077	Discarded commercial chemical product, off-specification material, or potential spill cleanup residue. Departments 218 & 219.	Solid	10 or 20 gallon fibre drum[3]	92087 92613	Mylar barrier 1 mil polyester barrier	The physical state of this waste stream is a solid (melting point = 199° F). Additional protection is provided by internal moisture barrier. Fibre drum packaging is authorized by DOT as non-bulk packaging for this material (refer to 49 CFR 172.101). Steel parts are treated to resist corrosion (locking band is electrogalvanized).
Benzene, U019	Discarded raw material (commercial chemical product), off-specification commercial chemical product, or potential raw material spill cleanup residue. (This waste stream could be a solid if decon/cleanup done with granular absorbent).	Liquid	55 gal mild steel drum[3]	93233	Baked phenolic resin coating[3]	Baked phenolic coating recommended for room temperature (<160° F) immersion service with aromatic hydrocarbons (Reference: Table 23-23, "Chemical Resistance of Coatings for Immersion Service", Perry's Chemical Engineers' Handbook, Sixth Edition).
		Solid	10 or 20 gallon fibre drum[3]	92087 92613	Mylar barrier 1 mil polyester barrier	The physical state of this waste stream when stored in fibre drums is a solid (liquid wastes may be stabilized with granular absorbent during cleanup activities). Fibre drum packaging is authorized by DOT as non-bulk packaging for this material (refer to 49 CFR 172.101). Additional protection is provided by internal moisture barrier.
Monochlorobenzene, U037	Discarded commercial chemical product, off specification commercial chemical product, or potential spill cleanup residue. Department 233. (This waste stream could be a solid if decon/cleanup done with granular absorbent).	Liquid	55 gal mild steel drum[3]	93233	Baked phenolic resin coating[3]	Baked phenolic coating recommended for room temperature (<160° F) immersion service with aromatic hydrocarbons and chlorinated hydrocarbons (Reference: Table 23-23, "Chemical Resistance of Coatings for Immersion Service", Perry's Chemical Engineers' Handbook, Sixth Edition).
		Solid	10 gal or 20 gal fibre drum[3]	92087 92613	Mylar barrier 1 mil polyester barrier	The physical state of this waste stream is a solid. Additional protection is provided by internal moisture barrier. Fibre drum packaging is authorized by DOT as non-bulk packaging for this material (refer to 49 CFR 172.101). Steel parts are treated to resist corrosion (locking band is electrogalvanized).
Ortho-dichlorobenzene (ODBC), U070	Discarded commercial chemical product, off specification commercial chemical product, or potential spill cleanup residue. Department 224. (This waste stream could be a solid if decon/cleanup done with granular absorbent).	Liquid	55 gal mild steel drum[3]	93233	Baked phenolic resin coating[3]	Baked phenolic coating recommended for room temperature (<160° F) immersion service with aromatic hydrocarbons and chlorinated hydrocarbons (Reference: Table 23-23, "Chemical Resistance of Coatings for Immersion Service", Perry's Chemical Engineers' Handbook, Sixth Edition).
		Solid	10 gal or 20 gal fibre drum[3]	92087 92613	Mylar barrier 1 mil polyester barrier	The physical state of this waste stream is a solid. Fibre drum packaging is authorized by DOT as non-bulk packaging for this material (refer to 49 CFR 172.101). Additional protection is provided by internal moisture barrier. Steel parts are treated to resist corrosion (locking band is electrogalvanized).
Para-dichlorobenzene (PDCB), U072	Discarded commercial chemical product, off-specification material, or potential spill cleanup residue. Department 224.	Solid	10 gal or 20 gal fibre drum[3]	92087 92613	Mylar barrier 1 mil polyester barrier	The physical state of this waste stream is a solid (melting point is 127.4° F). Fibre drum packaging is authorized by DOT as non-bulk packaging for this material (refer to 49 CFR 172.101). Additional protection is provided by internal moisture barrier. Steel parts are treated to resist corrosion (locking band is electrogalvanized).

Notes:

[1] - Refer to Packaging Specification sheets in Appendix 10 for container construction materials, dimensions and usable volumes, applicable UN standards and DOT specifications, and other manufacturer specifications.

[2] - 2 coats Heresite P-413D, P-4443 lacquer or equivalent. (Baked phenolic resin, 1.5 mil D.F.T.).

[3] - Container size and type may vary for discarded commercial chemical products, raw materials, intermediates, and spill cleanup residues, depending on requirements of offsite treatment/disposal facility. Wastes which are discarded raw materials may be packaged in original container in which the material was purchased.

[4] - Specifications for the 30 gallon open top plastic drum used for waste phosphorus are included in the Packing Specification sheets in Appendix 8. Refer to the unnumbered sheet labeled "Waste Phosphorus".

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WASTE STREAM COMMON NAME & EPA WASTE CLASSIFICATION	WASTE DESCRIPTION	PHYSICAL STATE	CONTAINER SIZE/TYPE	DRUM STOCK NUMBER[1]	BARRIER OR INTERNAL COATING TYPE	CONTAINER COMPATIBILITY RATIONALE
Xylene, U239	Discarded commercial chemical product (raw material), off-specification material, or potential spill cleanup residue. Department 255. (This waste stream could be a solid if decon/cleanup done with granular absorbent).	Liquid	55 gal mild steel drum[3]	93233	Baked phenolic resin coating[2]	Baked phenolic coating recommended for room temperature (<160° F) immersion service with aromatic hydrocarbons (Reference: Table 23-23, "Chemical Resistance of Coatings for Immersion Service", Perry's Chemical Engineers' Handbook, Sixth Edition).
		Solid	10 gal or 20 gal fibre drum[3]	92087 92613	Mylar barrier 1 mil polyester barrier	The physical state of this waste stream when stored in fibre drums is a solid (liquid wastes may be stabilized with granular absorbent during cleanup activities). Fibre drum packaging is authorized by DOT as non-bulk packaging for this material (refer to 49 CFR 172.101). Additional protection is provided by internal moisture barrier.
Formic Acid, U123	Discarded commercial chemical product (raw material) or off-specification material, or potential spill cleanup residue. Department 255. (This waste stream could be a solid if decon/cleanup done with granular absorbent).	Liquid	15 gal plastic (HDPE) tighthead drum[3]	93500	None	Polyethylene has complete resistance to all concentrations of Formic Acid at ambient temperatures (Reference: Table 23-2 "Detailed Corrosion Data on Construction Materials", Perry's Chemical Engineers' Handbook, Sixth Edition).
		Solid	10 gal or 20 gal fibre drum[3]	92087 92613	Mylar barrier 1 mil polyester barrier	The physical state of this waste stream when stored in fibre drums is a solid (liquid wastes may be stabilized with granular absorbent during cleanup activities). Fibre drum packaging is authorized by DOT as non-bulk packaging for this material (refer to 49 CFR 172.101). Additional protection is provided by internal moisture barrier.
Methyl Isobutyl Ketone, U161	Manufacturing chemical intermediate, or potential spill cleanup residue. Department 277. (This waste stream could be a solid if decon/cleanup done with granular absorbent).	Liquid	55 gal mild steel drum[3]	93233	Baked phenolic resin coating[2]	Baked phenolic coating recommended for room temperature (<160° F) immersion service with aliphatic hydrocarbons (Reference: Table 23-23, "Chemical Resistance of Coatings for Immersion Service", Perry's Chemical Engineers' Handbook, Sixth Edition).
		Solid	10 gal or 20 gal fibre drum[3]	92087 92613	Mylar barrier 1 mil polyester barrier	The physical state of this waste stream when stored in fibre drums is a solid (liquid wastes may be stabilized with granular absorbent during cleanup activities). Fibre drum packaging is authorized by DOT as non-bulk packaging for this material (refer to 49 CFR 172.101). Additional protection is provided by internal moisture barrier.
Phosphorus Sulfide, U189	Manufacturing chemical intermediate, or potential spill cleanup residue. Department 245.	Solid	6-gal Fibre Drum[3] or Roll Off	92088	0.0005" aluminum foil barrier	The physical state of this waste stream is a solid. Fibre drum packaging is authorized by DOT as non-bulk packaging for this material (refer to 49 CFR 172.101). Steel parts are treated to resist corrosion (locking band is electrogalvanized). Additional protection is provided by internal moisture barrier.

Notes:

[1] - Refer to Packaging Specification sheets in Appendix 10 for container construction materials, dimensions and usable volumes, applicable UN standards and DOT specifications, and other manufacturer specifications.

[2] - 2 coats Heresite P-413D, P-4443 lacquer or equivalent. (Baked phenolic resin, 1.5 mil D.F.T.).

[3] - Container size and type may vary for discarded commercial chemical products, raw materials, intermediates, and spill cleanup residues, depending on requirements of offsite treatment/disposal facility. Wastes which are discarded raw materials may be packaged in original container in which the material was purchased.

[4] - Specifications for the 30 gallon open top plastic drum used for waste phosphorus are included in the Packing Specification sheets in Appendix 8. Refer to the unnumbered sheet labeled "Waste Phosphorus".

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Aniline, U012	Discarded commercial chemical product (raw material), off-specification material, or potential spill cleanup residue. Departments 256 & 222. (This waste stream could be a solid if decon/cleanup done with granular absorbent).	Liquid	55 gal mild steel drum[3]	93233	Baked phenolic resin coating[2]	Baked phenolic coating recommended for room temperature (<160° F) immersion service with aromatic hydrocarbons (Reference: Table 23-23, "Chemical Resistance of Coatings for Immersion Service", Perry's Chemical Engineers' Handbook, Sixth Edition).
		Solid	10 gal or 20 gal fibre drum[3]	92087 92613	Mylar barrier 1 mil polyester barrier	The physical state of this waste stream when stored in fibre drums is a solid (liquid wastes may be stabilized with granular absorbent during cleanup activities). Fibre drum packaging is authorized by DOT as non-bulk packaging for this material (refer to 49 CFR 172.101). Additional protection is provided by internal moisture barrier.
Methyl Ethyl Ketone, U159	Discarded commercial chemical product (raw material), off-specification material, or potential spill cleanup residue. Department 277. (This waste stream could be a solid if decon/cleanup done with granular absorbent).	Liquid	55 gal mild steel drum[3]	93233	Baked phenolic resin coating[2]	Baked phenolic coating recommended for room temperature (<160° F) immersion service with aliphatic hydrocarbons (Reference: Table 23-23, "Chemical Resistance of Coatings for Immersion Service", Perry's Chemical Engineers' Handbook, Sixth Edition).
		Solid	10 gal or 20 gal fibre drum[3]	92087 92613	Mylar barrier 1 mil polyester barrier	The physical state of this waste stream when stored in fibre drums is a solid (liquid wastes may be stabilized with granular absorbent during cleanup activities). Fibre drum packaging is authorized by DOT as non-bulk packaging for this material (refer to 49 CFR 172.101). Additional protection is provided by internal moisture barrier.
NON-ROUTINE WASTE						
Benzene Contaminated Equipment/PPE and Miscellaneous Materials including Benzene Contaminated Sand and Carbon, D018, D021, D027	Spill cleanup and/or non-routine equipment decon in Departments 233 & 224, or Department 233 Sump Cleanout (sand and carbon).	Solid	20-gal Fibre Drum	92613	1 mil Polyester barrier	The physical state of this waste stream is a solid. Additional protection is provided by internal moisture barrier. Fibre drum packaging is authorized by DOT as non-bulk packaging for this material (refer to 49 CFR 172.101). Steel parts are treated to resist corrosion (locking band is electrogalvanized).
		Liquid	55-gallon Steel Drum	93233	Baked phenolic resin coating[2]	Baked phenolic coating recommended for room temperature (<160° F) immersion service with aromatic hydrocarbons (Reference: Table 23-23, "Chemical Resistance of Coatings for Immersion Service", Perry's Chemical Engineers' Handbook, Sixth Edition).
Mercury Contaminated Soil, D009	Mercury contaminated soil from former Chlor Alkali process area.	Solid	Covered PE lined Rolloff or 10 gal or 20 gal fibre drum	NA 92087 92613	NA Mylar barrier 1 mil polyester barrier	The physical state of this waste stream is a solid. Additional protection is provided by internal moisture barrier in fibre drum or polyethylene liner if in rolloff. Mercury contaminated soil would not act as a solvent to the rolloff's polyethylene liner, nor be corrosive to steel if the liner were punctured or torn. Fibre drum packaging is authorized by DOT as non-bulk packaging for this material (refer to 49 CFR 172.101).
Chlorophenol Contaminated Material, D022, D032, D037, D041, D042, F020, F021	Possible wastes from the past production of Trl, Tetra, and Penta Chlorophenol	Solid	55- and 85-gallon drums overpacked in 110 gal, 16 gauge steel overpack drums	none	Rust resistant interior and exterior paint coating.	Exterior rust resistant paint coating. Drums inspected weekly, will be overpacked or contents transferred to a new drum if evidence of rusting or corrosion is identified.

Notes:

[1] - Refer to Packaging Specification sheets in Appendix 10 for container construction materials, dimensions and usable volumes, applicable UN standards and DOT specifications, and other manufacturer specifications.

[2] - 2 coats Heresite P-413D, P-4443 lacquer or equivalent. (Baked phenolic resin, 1.5 mil D.F.T.).

[3] - Container size and type may vary for discarded commercial chemical products, raw materials, intermediates, and spill cleanup residues, depending on requirements of offsite treatment/disposal facility. Wastes which are discarded raw materials may be packaged in original container in which the material was purchased.

[4] - Specifications for the 30 gallon open top plastic drum used for waste phosphorus are included in the Packing Specification sheets in Appendix 8. Refer to the unnumbered sheet labeled "Waste Phosphorus".

Attachment A

ADDENDUM TO FORM 3

Listed below are solid wastes that do not meet any RCRA category but are considered hazardous under Illinois Law or by Monsanto Guidelines.

	WASTE NAME	ANNUAL QUANTITY	UNITS	PROCESS CODE	
A.	Waste Therminol	30,000	P	SO1	TO3
B.	Used Compressor Oil	10,000	P	SO1	TO3
C.	Scrap Sulfur	20,000	P	SO1	TO3
D.	Used Laboratory Glassware	5,000	P	SO1	TO3
E.	Non-Hazardous Lab Samples	2,000	P	SO1	TO3
F.	Silicon Dioxide Filter Aid	50,000	P	SO1	TO3
G.	Quaternary Exchange Resin	300	P	SO1	TO3
H.	Salt Saturator Solids	1,000	P	SO1	TO3
I.	Spent Vanadium Catalyst	0	P	SO1	TO3
J.	Paraphenetidine Still Residue	60,000	P	SO1	TO3
K.	Triphenyl Phosphate Residue	40,000	P	SO1	TO3
L.	Nitrodiphenyl Amine Residue	200,000	P	SO1	TO3
M.	Scrap Orthonitrophenol	30,000	P	SO1	TO3
N.	Liquid Lab Samples	54,000	P	SO1	TO3
O.	Solid Lab Samples	104,000	P	SO1	TO3
P.	Chlorotoluene Contaminated Carbon	20,000	P	SO1	TO3
Q.	Orthonitroaniline Residue	360,000	P	SO1	TO3
R.	Toluene Contaminated Filters	10,000	P	SO1	TO3
S.	Benzene Contaminated Filters	2,000	P	SO1	TO3
T.	Santicizer-160 Contaminated Filter Aid	15,000	P	SO1	TO3
U.	Benzene Contaminated Carbon	180,000	P	SO1	TO3
V.	Phthalic Anhydride Waste	75,000	P	SO1	TO3
W.	Orthodichlorobenzene Still Bottoms	50,000	P	SO1	TO3

	WASTE NAME	ANNUAL QUANTITY	UNITS	PROCESS COD
x.	Paranitrochlorobenzene Contaminated Equip.	1,000	P	SO1
y.	Paranitroaniline Contaminated Equipment	1,000	P	SO1
z.	Nitrodiphenylamine Contaminated Equip.	1,000	P	SO1
(aa)	Chlorophenol Still Bottoms	50,000	P	SO1, TO1, T
(bb)	Scrap Nitrated Dodecylbenzene	1,000	P	SO1 TO3
(cc)	Scrap Nitrated Orthodichlorobenzene	10,000	P	SO1 TO3
(dd)	Scrap Santophen I Product	5,000	P	SO1 TO3
(ee)	Nitrochlorobenzene Residue	4,250,000	P	SO1 TO3
(ff)	Off Spec P-Tert-Butylphenol	20,000	P	SO1 TO3
(gg)	Paranitrochlorobenzene Sludge	150,000	P	SO1 TO3
(hh)	Scrap Paranitrochlorobenzene	10,000	P	SO1 TO3
(ii)	Benzene Contaminated Equipment	1,000	P	SO1 TO3
(jj)	Orthonitrochlorobenzene Product	20,000	P	SO1 TO3
(kk)	TSCL STO Still Residue	740,000	P	SO1 TO3
(ll)	DCA Still Residue	53,000	P	SO1 TO3
(mm)	AZO Residue	1,500,000	P	SO1, SO2, T
(nn)	Phenolic Residue	1,500,000	P	SO1 TO3
(oo)	PNPT Filter Cartridges	41,000	P	SO1 TO3
(pp)	p-Phenetidine Residue	31,000	P	SO1 TO3
(qq)	PCE Still Residue	414,000	P	SO1 TO3
(rr)	Reject Para-TSCL	105,000	P	SO1 TO3
(ss)	Waste Oils	150,000	P	SO1 TO3
(tt)	Dimethyl Formamide	48,000	P	SO1 TO3